

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims**

Claims 1-10 (Cancelled).

Claim 11 (Currently Amended): A diagnostic kit for detecting pulmonary and extra pulmonary tuberculosis, comprising a test card coated with a hydrophobic material, mixing sticks, ~~comprising~~ a glycolipid from a *Mycobacterium tuberculosis* H<sub>37</sub>RV antigen suspension intercalated or coupled with a liposome surface, a positive control comprising an anti-mycobacterial glycolipid antibody from *Mycobacterial tuberculosis*, and a negative control comprising serum antibodies from a subject not previously exposed to *Mycobacterial tuberculosis*.

Claim 12 (Previously Presented): The kit as claimed in claim 11, wherein said antigen suspension is a liposome antigen and said test card is a plastic slide.

---

Claim 13 (Previously Presented): The kit as claimed in claim 11, wherein said negative control is prepared from the blood of a normal young rabbit.

Claim 14 (Previously Presented): The kit as claimed in claim 11, wherein said positive control is prepared from a 4 to 6 month old rabbit which is immunized with mycobacterium antigens and bled periodically.

Claim 15 (Currently Amended): A method for testing an individual ~~individuals~~ for tuberculosis comprising the steps of applying a positive control, a negative control and a sample to a hydrophobic material, wherein said positive control is an anti-mycobacterial glycolipid antibody from *Mycobacterial tuberculosis*, and wherein said negative

control ~~are~~ is a serum antibodies-antibody from a subject not previously exposed to *Mycobacterial tuberculosis*; adding an antigen suspension to said positive, said negative and said sample; and interpreting a result, wherein clumping of a specific antigen in the suspension and an antibody in the positive control and ~~the~~ a test sample from the individual is prognostic for an active tuberculosis infection, and wherein the antigen is a glycolipid antigen from *Mycobacterium tuberculosis* H<sub>37</sub>Rv (ATCC-27294).

Claim 16 (Previously Presented): The method as claimed in claim 15, wherein said antigen suspension is a liposome antigen.

Claim 17 (Currently Amended): The method as claimed in claim 16, wherein said ~~positive control~~ glycolipid antigen is prepared comprising the steps of:

growing *Mycobacterium tuberculosis* H<sub>37</sub>Rv (ATCC-27294) strain on Sautons media;

harvesting cells in the media by centrifugation at 4° to 10°C;

subjecting said cells to the step of sonication;

extracting ~~the~~ unpurified antigens from said cells;

adding chloroform and methanol mixture (2:1) to said unpurified antigens with stirring at room temperature; and

subjecting the mixture to the step of filtration, thereby forming a suspension;

separating said suspension into an upper aqueous phase and a lower organic phase;

removing said upper aqueous phase;

drying said organic phase, thereby forming a solvent containing a lipid; and

purifying ~~said lipid~~ the glycolipid antigen.

Claim 18 (Previously Presented): The method as claimed in claim 15, wherein said antigen suspension is prepared comprising the steps of:

adding a phosphatidylcholine, a cholesterol, a lipid antigen and a dye in a flask, thereby forming a solvent layer;

evaporating said solvent layer, thereby forming dried contents;  
dissolving said dried contents in absolute alcohol at 4° to 10°C for 1 to 2 hours to produce said antigen suspension;  
adding said antigen suspension to a sucrose solution;  
maintaining a temperature of 2° to 8°C overnight;  
subjecting said suspension to centrifugation, thereby forming a supernatant and a pellet;  
discarding said supernatant; and  
suspending said pellet in a buffer.

Claim 19 (Currently Amended): The method as claimed in claim 16, wherein said ~~lipid~~ glycolipid antigen is further purified using column chromatography.

Claim 20 (Previously Presented): The method as claimed in claim 18, wherein said buffer comprises NaH<sub>2</sub>PO<sub>4</sub>·2H<sub>2</sub>O, KH<sub>2</sub>PO<sub>4</sub>, EDTA, Choline Chloride and Thiomersol.

Claim 21 (Previously Presented): The method as claimed in claim 18, wherein said dye is Sudan black B or Sudan red in chloroform.

---

Claim 22 (Currently Amended): The method as claimed in claim 15, wherein said anti-mycobacterial glycolipid antibody is isolated from a rabbit immunized against a ~~purified~~ the glycolipid antigen from *Mycobacterium tuberculosis* H<sub>37</sub>Rv.

Claim 23 (Previously Presented): The method as claimed in claim 15, wherein said antibodies from a subject not previously exposed to *Mycobacterial tuberculosis* are isolated from a rabbit that has not been exposed to *Mycobacterial tuberculosis*.

Claim 24 (Previously Presented): The method as claimed in claim 15, wherein said anti-mycobacterial glycolipid antibody is coupled onto a surface of a liposome.

Application No. 10/590,118  
Paper Dated: August 13, 2009  
In Reply to USPTO Correspondence of April 29, 2009  
Attorney Docket No. 4544-062454

Claim 25 (Previously Presented): The method as claimed in claim 23, wherein said rabbit was immunized against a heat inactivated sonicated *Mycobacterium tuberculosis* H37Rv strain.